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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,842	09/28/2001	Mikihiro Kaga	983.40662X00	5540

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Antonelli Terry Stout & Kraus  
1300 North Seventeenth street Suite 1800  
Arlington, VA 22209

EXAMINER

ROY, BAISAKHI

ART UNIT PAPER NUMBER

3737

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/937,842

Applicant(s)

KAGA ET AL.

Examiner

Baisakhi Roy

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 17-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 10,11,13,17 and 18 is/are allowed.  
6) ☒ Claim(s) 1,3-9,12,14-16 and 19-30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1, 3-13, and 17-30 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, 6-8, 19-27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. (6240309) in view of Fletcher et al. (5257991). Yamashita et al. disclose a biological optical measurement instrument with a probe irradiating light beams having a plurality of wavelengths (abstract), collecting light transmitted through the subject with optical fibers held in place with an optical fiber fixing member, a support member to support the optical fiber fixing member, a supporting said probe with belts or elastic cord braids, a casing or holder body, and a stopper claw mechanism or screws to properly position each of probe casings (col. 12 lines 7-33). Yamashita et al. further teach said biological optical measurement instrument with the measurement probe to comprise a plate of base material with probe holders with holes to correspond to the optical fiber arrangement pattern, and where the fiber fixing member is a hollow cylindrical body with access portion as depicted in fig. 15, 24 for contact with the surface of the subject, a display system (col. 11 lines 64-67,

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col. 12 lines 1-33, col. 20 lines 47-67, col. 21 lines 1-9). Yamashita et al. also teach forming a fixing groove along an inner circumference of each of the fiber fixing member (col. 26 lines 15-25). Yamashita et al. however do not explicitly teach said hollow cylinder to comprise an access portion that extends longitudinally. In the same field of endeavor, Fletcher et al. disclose an optical measurement instrument comprising a cylindrical measurement probe which is provided with an optical fiber and where the cylindrical probe has an access cut out portion extending along a partial longitudinal length (col. 2 lines 7-15, col. 4 lines 3-15 lines 47-68). It would have therefore been obvious to one of ordinary skill in the art to use the probe structure teaching by Fletcher et al. in the teaching by Yamashita et al. for the purpose of using an optical measurement instrument with a probe holder arrangement for facilitating access to the subject.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of Fletcher et al. and further in view of Swanson et al. (5321501). Yamashita et al. do not explicitly teach a movement mechanism of the measurement probe. Swanson et al. disclose a probe device with the ability to constitute movement of the probe (as stated in claim) in horizontal direction (col. 2 lines 45-47, col. 6 lines 2-7). It would have therefore been obvious to one of ordinary skill in the art to use the probe device movement teaching by Swanson et al. in the teaching by Yamashita et al. and Fletcher et al. for the purpose of enabling movement of the probe, as stated in claim in the horizontal direction.

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5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of Fletcher et al. and further in view of Chance (5987351). Maki et al. and Yamashita et al. teach said probe device to include a shell plate with a hole but do not explicitly teach displacing hair. In the same field of endeavor, Chance discloses a biological optical measurement device with a probe with the ability to penetrate freely extending hair or displace hair to make contact with the scalp or skin (abstract, col. 15 lines 21-57, col. 16 lines 5-33, and claim 2). It would have therefore been obvious to one of ordinary skill in the art to use the hair displacement means teaching by Chance in the teaching by Yamashita et al. for the purpose of displacing hair coming in between the optical fibers and skin surface and directing light into the optical fibers.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of Fletcher et al. and further in view of Benaron et al. (5769791). Yamashita et al. do not explicitly teach said apparatus to include a light shielding mechanism to shield the light beams from the optical fibers and the subject. Benaron et al. disclose a biological optical measurement device where light does not pass directly through the fibers but mounted on a member as a shutter to shield the light beams from the optical fibers (col. 5 lines 9-16). It would have therefore been obvious to one of ordinary skill in the art to use the light shielding mechanism teaching by Benaron et al. in the teaching by Yamashita et al. for the purpose of shielding the light beams from the optical fiber and protecting the subject from the light beam from the optical fibers.

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7. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of Fletcher et al. in view of Chance and further in view of Costello et al. (5124130). Yamashita et al., Fletcher et al., and Chance teach a cylindrically shaped measurement probe with a cut out portion and able to penetrate through freely extending hair or displace hair but do not explicitly teach the bent shape of the guide extending through the middle of the holder. In the same field of endeavor, Costello et al. disclose an optical probe with fibers being bent (abstract, col. 4 lines 7-15). It would have been obvious to one of ordinary skill in the art to use the teaching by Costello et al. to modify the teaching Yamashita et al., Fletcher et al., and Chance for the purpose providing good light transmission qualities.

***Allowable Subject Matter***

1. The following is a statement of reasons for the indication of allowable subject matter:
2. Claim 10 is allowable because although Chance teaches displacing or penetrating freely extending hair, the reference does not teach a compressed air injection means to displace hair.
3. Claim 11 is allowable because although Sun et al. (4752141) teach measuring pressure of the surface the reference does not teach monitoring the contacting pressure or pushing pressure of the optical fiber.
4. Claim 13 is allowable because although Maki et al. (5803909) teach a mechanism to press the optical fiber onto the skin surface of the subject, the reference

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does not explicitly teach said mechanism to include a spring between the probe holder and casing.

5. Claims 17 and 18 are allowable because even though Maki et al. teach said claimed measurement probe to be positioned or held to the head of a subject and where signals are measured without waiting for complete stabilization of the subject and therefore permit movement of the subject (col. 26 lines 7-16), the reference does not explicitly teach holding the probe in such a manner to permit rocking of the subject.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.R.

BR

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700